**Solution Pipeline….**

[1: Import Libraries](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#l)

[2: Read Dataset](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#2)

[3: Dataset Overview](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#3)

•Descriptive Statistics: Measure of central tendency and measure of spread are observed.

•Duplicated Values Check

•Information about different datatypes of the features.

[4: Exploratory data analysis (EDA](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#4))

• Univariate analysis

• Bivariate analysis

[5: Data Preprocessing](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#5)

* + [Checking for outliers](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#5.1)
  + [Missing value Treatment](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#5.2)
  + [Checking for imbalanced data](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#5.3)
  + [Handle Imbalance data](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#5.3.1) (Performed oversampling by SMOTE)

[6: Splitting the Dataset](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#6) : Splitting the dataset into test and train data.

Power Transformation

[7: Model Building](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#7)

* + [Logistic Regression](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#7.1) Model Building
    - [Logistic Regression Model Evaluation](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#7.1.2)
    - ROC Curve
  + [K Nearest Neighbour (KNN)](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#7.2) Model Building
    - [KNN Model Evaluation](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#7.2.1)
    - Hyperparameter Tuning for best value of K
  + [XgBoost Model Building](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#8)
    - [XgBoost Hyperparameter Tuning](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#7.3.1)
    - [XgBoost Model Evaluation](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#7.3.2)

[8: Conclusion](http://localhost:8888/notebooks/Credit-card-fault-detection.ipynb#8)

A table giving the summary of evaluation matrix (F1 Score, Recall, Precision, Accuracy ) off the models .